

09/529882

FILE 'REGISTRY' ENTERED AT 12:38:49 ON 29 NOV 2000

E GATIFLOXACIN/CN 5

L1 1 SEA ABB=ON PLU=ON GATIFLOXACIN/CN

E DISODIUM EDETATE/CN 5

L2 1 SEA ABB=ON PLU=ON "DISODIUM EDETATE"/CN

- key terms

FILE 'CAPLUS' ENTERED AT 12:39:40 ON 29 NOV 2000

L3 253 SEA ABB=ON PLU=ON L1 OR GATIFLOXACIN

L4 0 SEA ABB=ON PLU=ON L3 AND (L2 OR (DISODIUM OR DI (W) (NA  
OR SODIUM)) (W) EDETATE)

FILE 'MEDLINE, BIOSIS, EMBASE, WPIDS, CONFSCI, SCISEARCH,

JICST-EPLUS, JAPIO' ENTERED AT 12:41:09 ON 29 NOV 2000

L5 0 SEA ABB=ON PLU=ON L4

FILE 'CAPLUS, MEDLINE, BIOSIS, EMBASE, WPIDS, CONFSCI, SCISEARCH,

JICST-EPLUS, JAPIO' ENTERED AT 12:42:16 ON 29 NOV 2000

L6 43 SEA ABB=ON PLU=ON YASUEDA S?/AU

L7 3670 SEA ABB=ON PLU=ON INADA K?/AU

L8 7 SEA ABB=ON PLU=ON L6 AND L7

L9 3706 SEA ABB=ON PLU=ON L6 OR L7

L10 2 SEA ABB=ON PLU=ON L9 AND L3

L11 7 SEA ABB=ON PLU=ON L8 OR L10

L12 5 DUP REM L11 (2 DUPLICATES REMOVED)

- Author (S)

L12 ANSWER 1 OF 5 CAPLUS COPYRIGHT 2000 ACS DUPLICATE 1

ACCESSION NUMBER: 2000:144737 CAPLUS

DOCUMENT NUMBER: 132:185458

TITLE: Aqueous liquid preparations of  
gatifloxacin

INVENTOR(S): Yasueda, Shinichi; Inada,  
Katsuhiko

PATENT ASSIGNEE(S): Senju Pharmaceutical Co., Ltd., Japan; Kyorin  
Pharmaceutical Co., Ltd.

SOURCE: PCT Int. Appl., 17 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000010570	A1	20000302	WO 1999-JP4483	19990820

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR,  
CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU,  
ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU,  
LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE,  
SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA,

Searcher : Shears 308-4994

09/529882

ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM  
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE,  
DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ,  
CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

AU 9953026 A1 20000314 AU 1999-53026 19990820

EP 1025846 A1 20000809 EP 1999-938550 19990820

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC,  
PT, IE, FI

BR 9906735 A 20000815 BR 1999-6735 19990820

PRIORITY APPLN. INFO.: JP 1998-235432 19980821

WO 1999-JP4483 19990820

AB This invention relates to aq. preps. contg. **gatifloxacin**  
[(+/-)-1-cyclopropyl-6-fluoro-1,4-dihydro-8-methoxy-7-(3-methyl-1-  
piperazinyl)-4-oxo-quinolinecarboxylic acid] or its salts and sodium  
edetate. Also disclosed are a method for enhancing the corneal  
permeability of **gatifloxacin**, a method for preventing  
crystn. of **gatifloxacin** and a method for preventing  
coloration of **gatifloxacin** each by blending  
**gatifloxacin** or its salt with sodium edetate. An aq. soln.  
for eye drops, ear drops, and nasal drops, contained  
**gatifloxacin** 0.5, Na edetate 0.1, NaCl 0.9, HCl/NaOH q.s. to  
pH 7, and sterilized water to 100 mL.

REFERENCE COUNT: 12

REFERENCE(S): (1) Anon; GB 2199745 A  
(2) Anon; EP 230295 A2 CAPLUS  
(9) Kubo, S; Chemotherapy 1994, V40(5), P333  
CAPLUS  
(11) Sasaki, H; Pharmaceutical Research 1995,  
V12(8), P1146 CAPLUS  
(12) Tanaka; Antimicrobial Agents and  
Chemotherapy 1995, V39(10), P2367 CAPLUS  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 2 OF 5 JAPIO COPYRIGHT 2000 JPO

ACCESSION NUMBER: 1999-029483 JAPIO

TITLE: COMPOSITION CONTAINING DIFLUPREDNATE

INVENTOR: KIMURA KIYOKO; YASUEDA SHINICHI;  
YAMAGUCHI MASAZUMI; INADA KATSUHIRO

PATENT ASSIGNEE(S): SENJU PHARMACEUT CO LTD, JP (CO 402938)  
MITSUBISHI CHEM CORP, JP (CO 000596)

PATENT INFORMATION:

PATENT NO	KIND	DATE	ERA	MAIN IPC
JP 11029483	A	19990202	Heisei	(6) A61K031-575

JP

APPLICATION INFORMATION

ST19N FORMAT: JP1998-129908 19980513  
Searcher : Shears 308-4994

09/529882

ORIGINAL: JP10129908 Heisei  
SOURCE: PATENT ABSTRACTS OF JAPAN (CD-ROM), Unexamined  
Applications, Vol. 99, No. 2

AN 1999-029483 JAPIO

AB PURPOSE: TO BE SOLVED: To obtain the subject composition good in transferability to a diseased part, homogeneous in drug distribution, hardly causing a sense of incompatibility and foreign body sensation, and capable of preventing and treating inflammatory disease and allergic disease by including difluprednate, an oil, water and an emulsifier.

CONSTITUTION: composition contains difluprednate, an oil containing a fatty acid ester of glycerol, water and an emulsifier containing a surfactant. The formulation amounts of the components are 10-100,000 pts.wt. oil, 100-100,000 pts.wt. water and 10-100,000 pts.wt. emulsifier based on 1 pt.wt. difluprednate. Especially, the weight ratio of the oil to the water, which is a medium, is preferably (1:4) to (1:99). The composition is prepared to form an aqueous preparation such as oil-in-water type emulsion. The administration in low doses sufficiently manifests drug action, and thereby the side effect is reduced and the composition is readily administered to a topical portion such as an eye, a nose and an ear.

L12 ANSWER 3 OF 5 JAPIO COPYRIGHT 2000 JPO

ACCESSION NUMBER: 1999-029463 JAPIO

TITLE: AQUEOUS SUSPENSION AGENT HAVING GOOD  
RE-DISPERSIBILITY

INVENTOR: YASUEDA SHINICHI; MATSUHISA KEIICHI;  
TERAYAMA HIDEO; INADA KATSUHIRO

PATENT ASSIGNEE(S): SENJU PHARMACEUT CO LTD, JP (CO 402938)

PATENT INFORMATION:

PATENT NO	KIND	DATE	ERA	MAIN IPC
JP 11029463	A	19990202	Heisei	(6) A61K009-107

JP

APPLICATION INFORMATION

ST19N FORMAT: JP1998-127510 19980511

ORIGINAL: JP10127510 Heisei

SOURCE: PATENT ABSTRACTS OF JAPAN (CD-ROM), Unexamined  
Applications, Vol. 99, No. 2

AN 1999-029463 JAPIO

AB PURPOSE: TO BE SOLVED: To obtain a stable aqueous suspension agent having good re-dispersibility when a slightly soluble medicine is prepared in injection, eye drop, nasal drop, oral agent, lotion, etc.

CONSTITUTION: aqueous suspension agent capable of readily re-dispersing and not causing aggregation or caking of disperse particles can be prepared by formulating an aqueous liquid agent of

Searcher : Shears 308-4994

a slightly soluble medicine with a water-soluble polymer in the range from a concentration which starts to lower surface tension of liquid agent to a concentration at which lowering of surface tension is stopped. The aqueous suspension agent is useful for injections, eye drops, nasal drops, oral agents, lotions, etc., because of good redispersibility.

L12 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2000 ACS DUPLICATE 2  
 ACCESSION NUMBER: 1998:761804 CAPLUS  
 DOCUMENT NUMBER: 130:7437  
 TITLE: Aqueous suspensions with excellent redispersibility  
 INVENTOR(S): Yasueda, Shin-ichi; Matsuhisa, Keiichi; Terayama, Hideo; Inada, Katsuhiko  
 PATENT ASSIGNEE(S): Senju Pharmaceutical Co., Ltd., Japan  
 SOURCE: PCT Int. Appl., 19 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9851281	A1	19981119	WO 1998-JP1998	19980430
W: CA, KR, US				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
EP 995435	A1	20000426	EP 1998-917756	19980430
R: BE, CH, DE, ES, FR, GB, IT, LI				
JP 11029463	A2	19990202	JP 1998-127510	19980511
PRIORITY APPLN. INFO.:				
			JP 1997-124166	19970514
			WO 1998-JP1998	19980430

AB An aq. suspension comprises hardly sol. drugs and water-sol. polymers at a concn. within a range from the concn. at which the decrease in the surface tension of the liq. prepns. is initiated to the concn. at which such decrease is terminated. These prepns. can be easily redispersed and undergo neither aggregation of the dispersed particles nor caking. The excellent redispersibility of these prepns. makes them useful as injections, eye drops, nasal drops, drugs for internal use, lotions, etc. An ophthalmic suspension contained fluorometholone 0.1, Me cellulose 0.0006, NaCl 0.85, Na2HPO4.cntdot.12H2O 0.1, benzalkonium chlorides 0.005 g, 0.1 N HCl q.s. to pH 7, and distd. water to 100 mL.

REFERENCE COUNT: 5  
 REFERENCE(S): (1) Anon; EP 531529 A1  
 (2) Anon; US 5366985 A  
 (3) Anon; WO 9217174 A1 CAPLUS  
 Searcher : Shears 308-4994

09/529882

(4) Nippon Kayaku Co, Ltd; JP 52-96721 A 1977  
(5) Takeda Chemical Industries, Ltd; JP  
05-186348 A 1993

L12 ANSWER 5 OF 5 WPIDS COPYRIGHT 2000 DERWENT INFORMATION LTD

ACCESSION NUMBER: 1998-585485 [50] WPIDS

DOC. NO. CPI: C1998-175294

TITLE: Liquid di fluprednate composition comprising an  
oil, water and emulsifier - used to treat  
inflammatory and allergic diseases e.g. allergic  
conjunctivitis, vernal conjunctivitis and  
blepharitis marginalis.

DERWENT CLASS: A96 B01

INVENTOR(S): INADA, K; KIMURA, M; YAMAGUCHI, M;  
YASUEDA, S; KATSUHIRO, I; MASAKO, K;  
MASAZUMI, Y; SHIN-ICHI, Y

PATENT ASSIGNEE(S): (MITU) MITSUBISHI CHEM CORP; (SENP) SENJU PHARM CO  
LTD; (SENP) SENJU SEIYAKU KK

COUNTRY COUNT: 30

PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
EP 878197	A1	19981118	(199850)*	EN	12
R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI					
JP 11029483	A	19990202	(199915)		8
CA 2237503	A	19981114	(199917)		
CN 1200926	A	19981209	(199917)		
KR 98087017	A	19981205	(200009)		
US 6114319	A	20000905	(200044)		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
EP 878197	A1	EP 1998-108611	19980512
JP 11029483	A	JP 1998-129908	19980513
CA 2237503	A	CA 1998-2237503	19980513
CN 1200926	A	CN 1998-109772	19980514
KR 98087017	A	KR 1998-17258	19980513
US 6114319	A	US 1998-76124	19980512

PRIORITY APPLN. INFO: JP 1997-124415 19970514

AN 1998-585485 [50] WPIDS

AB EP 878197 A UPAB: 19981217

A difluprednate liquid composition comprises difluprednate, oil,  
water and an emulsifier.

Searcher : Shears 308-4994

09/529882

USE - Difluprednate has antiinflammatory and antiallergic activity and is used to treat inflammatory and allergic diseases e.g. allergic conjunctivitis, vernal conjunctivitis, blepharitis marginalis, acatarrhal conjunctivitis and uveitis.

ADVANTAGE - The composition allows uniform drug distribution and superior transfer of difluprednate into a lesion and is associated with less uncomfortable feeling and foreign sensation.  
Dwg.0/0

FILE 'CAPLUS' ENTERED AT 12:44:28 ON 29 NOV 2000

L13 1 SEA ABB=ON PLU=ON L3 AND ((EYE OR EAR OR NOSE OR NASAL  
OR OCULAR) (3A) DROP)  
L14 3 SEA ABB=ON PLU=ON L3 (S) (AQUEOUS OR AQ)  
L15 3 SEA ABB=ON PLU=ON L13 OR L14

L15 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2000 ACS

ACCESSION NUMBER: 2000:144737 CAPLUS

DOCUMENT NUMBER: 132:185458

TITLE: Aqueous liquid preparations of  
gatifloxacin

INVENTOR(S): Yasueda, Shinichi; Inada, Katsuhiko

PATENT ASSIGNEE(S): Senju Pharmaceutical Co., Ltd., Japan; Kyorin  
Pharmaceutical Co., Ltd.

SOURCE: PCT Int. Appl., 17 pp.  
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000010570	A1	20000302	WO 1999-JP4483	19990820
W:	AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
AU 9953026	A1	20000314	AU 1999-53026	19990820
EP 1025846	A1	20000809	EP 1999-938550	19990820
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI			
BR 9906735	A	20000815	BR 1999-6735	19990820
PRIORITY APPLN. INFO.:			JP 1998-235432	19980821
			WO 1999-JP4483	19990820
	Searcher	:	Shears	308-4994

AB This invention relates to aq. prepns. contg. **gatifloxacin** [(+.-)-1-cyclopropyl-6-fluoro-1,4-dihydro-8-methoxy-7-(3-methyl-1-piperazinyl)-4-oxo-quinolinecarboxylic acid] or its salts and sodium edetate. Also disclosed are a method for enhancing the corneal permeability of **gatifloxacin**, a method for preventing crystn. of **gatifloxacin** and a method for preventing coloration of **gatifloxacin** each by blending **gatifloxacin** or its salt with sodium edetate. An aq. soln. for eye drops, ear drops, and nasal drops, contained **gatifloxacin** 0.5, Na edetate 0.1, NaCl 0.9, HCl/NaOH q.s. to pH 7, and sterilized water to 100 mL.

IT 112811-59-3, **Gatifloxacin**  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (stabilized aq. prepns. contg. **gatifloxacin** and edetate)

REFERENCE COUNT: 12  
 REFERENCE(S): (1) Anon; GB 2199745 A  
 (2) Anon; EP 230295 A2 CAPLUS  
 (9) Kubo, S; Chemotherapy 1994, V40(5), P333 CAPLUS  
 (11) Sasaki, H; Pharmaceutical Research 1995, V12(8), P1146 CAPLUS  
 (12) Tanaka; Antimicrobial Agents and Chemotherapy 1995, V39(10), P2367 CAPLUS  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2000 ACS  
 ACCESSION NUMBER: 1999:736482 CAPLUS  
 DOCUMENT NUMBER: 131:342037  
 TITLE: Oral medicinal preparations with reproducible release of **gatifloxacin** or its salts or hydrates  
 INVENTOR(S): Bartholomaeus, Johannes; Betzing, Juergen  
 PATENT ASSIGNEE(S): Gruenenthal G.m.b.H., Germany  
 SOURCE: PCT Int. Appl., 27 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9958129	A1	19991118	WO 1999-EP2893	19990429
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, ZA				

Searcher : Shears 308-4994

RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC,  
NL, PT, SE

DE 19820801 A1 19991125 DE 1998-19820801 19980509  
AU 9940352 A1 19991129 AU 1999-40352 19990429

PRIORITY APPLN. INFO.:

DE 1998-19820801 19980509  
WO 1999-EP2893 19990429

AB Solid oral medicinal preps. having a multiphase structure and good bioavailability are provided for oral administration of gatifloxacin or its pharmaceutically suitable salts or hydrates thereof, which also contain additives including fillers, binding agents, lubricants, disintegrating agents, or mixts. thereof. The inner phase contains the active ingredient (gatifloxacin), binding agents, fillers, disintegrating agents, or mixts. thereof; .gtoreq.1 outer phase consists of .gtoreq.1 disintegrating agent as well as other additives selected from .gtoreq.1 lubricant and possibly fillers and/or binding agents. Tablets, granules, pellets, etc. prepd. from these ingredients by granulation show a drug release interval of 6.5-25 min. Thus, 110.47 g microcryst. cellulose and 81 g hydroxypropylcellulose were sieved, mixed with 586.13 g **gatifloxacin** (moisture content 7.87 wt.%), and granulated with 700 mL aq. hydroxypropylcellulose soln. for 5 min; the granulate was sieved, dried at 50.degree. for 17 h, sieved, mixed with 16.20 g Mg stearate, and pressed into tablets with a hardness of 140-150 N.

REFERENCE COUNT:

2

REFERENCE(S):

- (1) Kyorin, S; EP 0230295 A 1987  
(2) Rinaldi, M; US 5436253 A 1995

L15 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2000 ACS

ACCESSION NUMBER: 1999:654922 CAPLUS

DOCUMENT NUMBER: 131:295090

TITLE: Fundamental and clinical studies of gatifloxacin in ophthalmology

AUTHOR(S): Ooishi, Masao; Tazawa, Yutaka; Fukuda, Atsushi; Suzuki, Akiko; Imai, Akira; Sasaki, Kazuyuki; Kitagawa, Kazuko; Asano, Koichi; Hujiwara, Takaaki; Yoshino, Kei; Suzuki, Mari; Miyanaga, Yoshitaka; Tokuda, Kazuo; Miyao, Yoko; Hara, jiro

CORPORATE SOURCE: Dep. Ophthalmol., Niigata Univ., Sch. Med., 757 Ichiban-cho, Asahimachi-dori, Niigata, 951-8510, Japan

SOURCE: Nippon Kagaku Ryoho Gakkai Zasshi (1999), 47(Suppl. 2, Gatifloxacin), 387-401  
CODEN: NKRZE5; ISSN: 1340-7007

PUBLISHER: Nippon Kagaku Ryoho Gakkai

DOCUMENT TYPE: Journal

LANGUAGE: Japanese

AB Studies of the fundamental characteristics and clin. usefulness of  
Searcher : Shears 308-4994



gatifloxacin, a newly developed fluoroquinolone antibacterial drug, were performed in the field of ophthalmol. The antibacterial activity of gatifloxacin (GFLX) was found to be similar to tosufloxacin (TFLX) and sparfloracin (SPFX), and superior to ofloxacin (OFLX). MICs of GFLX against std. strains (35 strains) were below concn. (1.71 .mu.g/mL), rising to 200 mg oral administration of GFLX except for a single strain of *Pseudomonas aeruginosa*. Against *Staphylococcus aureus* stored in our lab., MIC90 of GFLX was 0.10 .mu.g/mL, a value similar to that of TFLX and SPFX. MIC90 of GFLX was 3.13 .mu.g/mL against *Pseudomonas aeruginosa* stored in our lab., a level of antibacterial activity between SPFX and TFLX against these strains. After 200 mg oral administration, concns. of GFLX in human aq. humor, tarsus gland tissue, and conjunctiva were 0.04-0.22 .mu.g/mL (at 2.37-24.03 h, 0.09-0.60 times the serum level), 4.36-6.02 .mu.g/g (at 1.87-2.5 h, 2.71-3.17 times the serum level), and 2.27-3.46 .mu.g/g (at 2.00-2.37 h, 1.22-1.48 times the serum level), resp. In a clin. study, GFLX was administered orally once or twice a day at daily doses of 200 mg, 300 mg, or 400 mg to forty-four cases evaluated for clin. efficacy. Clin. response was excellent in 34 cases, good in 7 cases, fair in 2 cases, and poor in 1 case, with an efficacy rate of 93.2% (41/44). As to bacteriol. efficacy, the eradication rate was 92.0% (23/25) for the twenty-five cases evaluated. Side effects were evaluated in 46 cases, and one case of discomfort epigastric was found, an appearance rate of 2.2% (1/46). In the 18 cases evaluated for abnormal lab. findings, there was one case of elevation of LAP, making the appearance rate of abnormal lab. findings 5.6% (1/18). Finally, the usefulness rate was 93.2% (41/44).

(FILE 'CAPLUS' ENTERED AT 12:44:28 ON 29 NOV 2000)

L16 0 SEA ABB=ON PLU=ON GFLX AND ((EYE OR EAR OR NOSE OR NASAL OR OCULAR) (3A) DROP)  
 L17 1 SEA ABB=ON PLU=ON GFLX(S) (AQUEOUS OR AQ)  
 L18 0 SEA ABB=ON PLU=ON GFLX AND (L2 OR (DISODIUM OR DI(W) (NA OR SODIUM)) (W) EDETATE)  
 L19 0 SEA ABB=ON PLU=ON (L17 OR L16 OR L18) NOT L15

(FILE 'MEDLINE, BIOSIS, EMBASE, WPIDS, CONFSCI, SCISEARCH, JICST-EPLUS, JAPIO' ENTERED AT 12:48:27 ON 29 NOV 2000)

L20 3 S L15  
 L21 0 S L16  
 L22 2 S L17  
 L23 0 S L18  
 L24 3 S L20 OR L22  
 L25 2 DUP REM L24 (1 DUPLICATE REMOVED)

L25 ANSWER 1 OF 2 WPIDS COPYRIGHT 2000 DERWENT INFORMATION LTD  
 ACCESSION NUMBER: 2000-282864 [24] WPIDS  
 DOC. NO. CPI: C2000-085299  
 Searcher : Shears 308-4994

09/529882

TITLE:                   Aqueous liquid preparation comprising  
                          gatifloxacin which has increased corneal  
                          permeability and stability.  
DERWENT CLASS:           B03  
INVENTOR(S):            INADA, K; YASUEDA, S  
PATENT ASSIGNEE(S):     (KYOR) KYORIN PHARM CO LTD; (SENP) SENJU PHARM CO  
                          LTD  
COUNTRY COUNT:         88  
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
-----					
WO 2000010570	A1	20000302	(200024)*	JA	16
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC					
MW NL OA PT SD SE SL SZ UG ZW					
W: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM					
EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KR KZ LC					
LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE					
SG SI SK SL TJ TM TR TT UA UG US UZ VN YU ZA ZW					
AU 9953026	A	20000314	(200031)		
EP 1025846	A1	20000809	(200039)	EN	
R: AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE					
BR 9906735	A	20000815	(200045)		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
-----			
WO 2000010570	A1	WO 1999-JP4483	19990820
AU 9953026	A	AU 1999-53026	19990820
EP 1025846	A1	EP 1999-938550	19990820
		WO 1999-JP4483	19990820
BR 9906735	A	BR 1999-6735	19990820
		WO 1999-JP4483	19990820

FILING DETAILS:

PATENT NO	KIND	PATENT NO
-----		
AU 9953026	A Based on	WO 200010570
EP 1025846	A1 Based on	WO 200010570
BR 9906735	A Based on	WO 200010570

PRIORITY APPLN. INFO: JP 1998-235432   19980821  
AN   2000-282864 [24]   WPIDS  
AB   WO 200010570 A UPAB: 20000522  
NOVELTY - Aqueous liquid preparation comprises  
gatifloxacin ((+/-)-1-cyclopropyl-6-fluoro-1,4-dihydro-8-  
methoxy-7-(3-methyl-1-piperazinyl)-4-oxo-quinolinecarboxylic acid)  
Searcher       :   Shears   308-4994

or its salt and sodium edetate.

ACTIVITY - Antibacterial; Antiinflammatory; Ophthalmological.

In a corneal permeability test a composition comprising **gatifloxacin** (0.5 g), sodium edetate (0.05 g), sodium chloride (0.9 g) and sterile water (to 100 ml) with a pH 6.0, was administered at 50 micro l to the eyes of white rabbits. The concentration of **gatifloxacin** in the vitreous humor after 1 hour was 1.93 micro g/ml compared to 1.30 micro g/ml for a comparative composition without the sodium edetate.

USE - As aqueous liquid preparations for administering **gatifloxacin** directly to the eyes, ears or nose, for treating bacterial infections, inflamed eyelids, styes, swollen tear sac, conjunctivitis, inflamed cornea, corneal edema, external or internal otitis or inflammation of the nasal cavity.

ADVANTAGE - Corneal permeability and solubility of **gatifloxacin** is enhanced, and crystallization and coloration of **gatifloxacin** is prevented.

Dwg.0/0

L25 ANSWER 2 OF 2 EMBASE COPYRIGHT 2000 ELSEVIER SCI. B.V.DUPLICATE 1  
 ACCESSION NUMBER: 1999360318 EMBASE  
 TITLE: Fundamental and clinical studies of **gatifloxacin** in ophthalmology.  
 AUTHOR: Ooishi M.; Tazawa Y.; Fukuda A.; Suzuki A.; Imai A.; Sasaki K.; Kitagawa K.; Asano K.; Hujiwara T.; Yoshino K.; Suzuki M.; Miyanaga Y.; Tokuda K.; Miyao Y.; Hara J.  
 CORPORATE SOURCE: M. Ooishi, Department of Ophthalmology, Niigata University, School of Medicine, 757 Ichiban-cho, Asahimachi-dori, Niigata 951-8510, Japan  
 SOURCE: Japanese Journal of Chemotherapy, (1999) 47/SUPPL. 2 (387-401).  
 Refs: 19  
 ISSN: 1340-7007 CODEN: NKRZE5  
 COUNTRY: Japan  
 DOCUMENT TYPE: Journal; Article  
 FILE SEGMENT: 012 Ophthalmology  
 030 Pharmacology  
 037 Drug Literature Index  
 038 Adverse Reactions Titles  
 LANGUAGE: Japanese  
 SUMMARY LANGUAGE: English; Japanese  
 AB Studies of the fundamental characteristics and clinical usefulness of **gatifloxacin**, a newly developed fluoroquinolone antibacterial drug, were performed in the field of ophthalmology. 1) Antibacterial activity: The antibacterial activity of **gatifloxacin** (**GFLX**) was found to be similar to tosofloxacin (**TFLX**) and sparfloxacin (**SPFX**), and superior to ofloxacin (**OFLX**). MICs of **GFLX** against standard strains  
 Searcher : Shears 308-4994

(35 strains) were below concentration (1.71  $\mu\text{g/mL}$ ), rising to 200 mg oral administration of GFLX except for a single strain of *Pseudomonas aeruginosa*. Against *Staphylococcus aureus* stored in our laboratory, MIC90 of GFLX was 0.10  $\mu\text{g/mL}$ , a value similar to that of TFLX and SPFX. MIC90 of GFLX was 3.13  $\mu\text{g/mL}$  against *Pseudomonas aeruginosa* stored in our laboratory, a level of antibacterial activity between SPFX and TFLX against these strains. 2) Ocular penetration: After 200 mg oral administration, concentrations of GFLX in human aqueous humor, tarsus gland tissue, and conjunctiva were 0.04  $\mu\text{g/mL}$  (at 2.37  $\pm$  0.22  $\mu\text{g/mL}$  (at 2.37  $\pm$  24.03 h, 0.09  $\pm$  0.60 times the serum level), 4.36  $\pm$  6.02  $\mu\text{g/g}$  (at 1.87  $\pm$  2.5 h, 2.71  $\pm$  3.17 times the serum level), and 2.27  $\pm$  3.46  $\mu\text{g/g}$  (at 2.00  $\pm$  2.37 h, 1.22  $\pm$  1.48 times the serum level), respectively. 3) Clinical study: In a clinical study, GFLX was administered orally once or twice a day at daily doses of 200 mg, 300 mg, or 400 mg to forty-four cases evaluated for clinical efficacy. Clinical response was excellent in 34 cases, good in 7 cases, fair in 2 cases, and poor in 1 case, with an efficacy rate of 93.2% (41/44). As to bacteriological efficacy, the eradication rate was 92.0% (23/25) for the twenty-five cases evaluated. Side effects were evaluated in 46 cases, and one case of discomfort epigastric was found, an appearance rate of 2.2% (1/46). In the 18 cases evaluated for abnormal laboratory findings, there was one case of elevation of LAP, making the appearance rate of abnormal laboratory findings 5.6% (1/18). Finally, the usefulness rate was 93.2% (41/44).

(FILE 'CAPLUS, MEDLINE, BIOSIS, EMBASE, WPIDS, CONFSCI, SCISEARCH, JICST-EPLUS, JAPIO' ENTERED AT 12:50:08 ON 29 NOV 2000)

L26 0 S L9 AND GFLX

FILE 'HOME' ENTERED AT 12:50:32 ON 29 NOV 2000